

AMENDMENTS TO THE CLAIMS

1. (Currently amended) A circuit for preventing unintentional power off of a mobile terminal, comprising:

a power charge unit for receiving a first state signal representing a state of the mobile terminal from a main chip set of the mobile terminal, changing or maintaining a state of a second state signal, which represents a normal power off of the mobile terminal and an abnormal power off of the mobile terminal, according to the state of the first state signal, and outputting the second state signal for representing a power on state to the mobile terminal when electric power is re-applied to the mobile terminal in the state of the abnormal power off of the mobile terminal;

~~wherein the power charge unit includes a battery, an inner battery unit equipped inside of the battery and an outer battery unit equipped outside of the battery;~~

an enable signal generator for generating a power-on enable signal by receiving the second state signal from the power charge unit; and

a voltage control unit for supplying the electric power from the battery to the main chip set of the mobile terminal in response to the power-on enable signal from the enable power signal generator by controlling the electric power to be suitable for the mobile terminal;

wherein the power charge unit comprises:

a battery; and

a JK flip-flop comprising a power supply end connected to the battery, a J end for receiving the first state signal, a K end for receiving an inverted signal of the first state signal, and a Q end for outputting an output signal as a second state signal.

2. (Previously Presented) The circuit as recited in claim 1, wherein the enable signal generator receives a power key input signal, which invokes to generate a power-hold signal in order to generate the power-on enable signal and the power-hold signal can be substituted by the second state signal.

3. (Currently amended) The circuit as recited in claim 1, wherein the power charge unit further comprises an inner battery unit equipped inside of the battery and an outer battery unit equipped outside of the battery,

wherein the inner battery unit has;

an inverter for receiving the first state signal and inverting the first state signal;

a first resistor having a first end connected to an input line of the first state signal and a second end connected to a ground; and

a second resistor having a first end connected to an output end of the inverter and a second end connected to the ground;

a third resistor for having a first end connected to electric power of the battery; ~~and~~ and a second end connected to the power supply end of the JK flip-flop,

~~a JK flip-flop for having a power supply end connected to a second end of the third resistor, a J end for receiving the first state signal, a K end for receiving an output signal of the inverter and outputting an output signal of Q end as a second state signal,~~

wherein the outer ~~batter~~ battery unit has:

a fourth register for having a first end connected to the Q end of said JK flip-flop; and

a first diode for a positive end connected to the second end of the fourth register and passing the second state signal as an enable signal.

4. (Currently amended) A method for preventing unintentional power off of a mobile terminal, which has a power charge unit for supplying electric power to the mobile terminal, an enable signal generator for generating a power-on enable signal to turn on the mobile terminal, and a voltage controller for supplying the suitable electric power to a main chip set of the mobile terminal in response to the power-on enable signal, the method comprising the steps of:

a) turning on the mobile terminal when one of a second state signal from the power charger unit and the power key input signal inputted from a user of the mobile terminal is inputted to the enable signal generator;

b) generating a first state signal at the main chip set of the mobile terminal and outputting the first state signal to the power charger unit to set the state of the first state signal as power-on at the power charge unit after turning on the mobile terminal;

c) changing or maintaining a state of the second state signal according to the state of the first state signal, which is power-on, in order to generate the second state signal at the power charger unit;

d) generating the first state signal at the main chip set and outputting the first state signal to the power charger unit to set the first state signal's state as power-off when a power off signal is inputted by a user;

e) changing the state of the second state signal according to the state of the first state signal, which is power-off, in order to inactivate the second state signal at the power charger unit;

f) turning off the mobile terminal after inactivating the second state signal; and

g) returning to step a) by the second state signal having the state of power-on, when electric power is re-applied to the mobile terminal in case that the mobile terminal is unintentionally powered off by loose contact with the power charge unit-, wherein the second state signal having the state of power-on is outputted from a JK flip-flop included in the power charge unit, wherein the JK flip-flop comprises,

a power supply end connected to a battery included in the power charge unit, a J end for receiving the first state signal, a K end for receiving an inverted signal of the first state signal, and a Q end for outputting an output signal as a second state signal.

5. (Canceled)